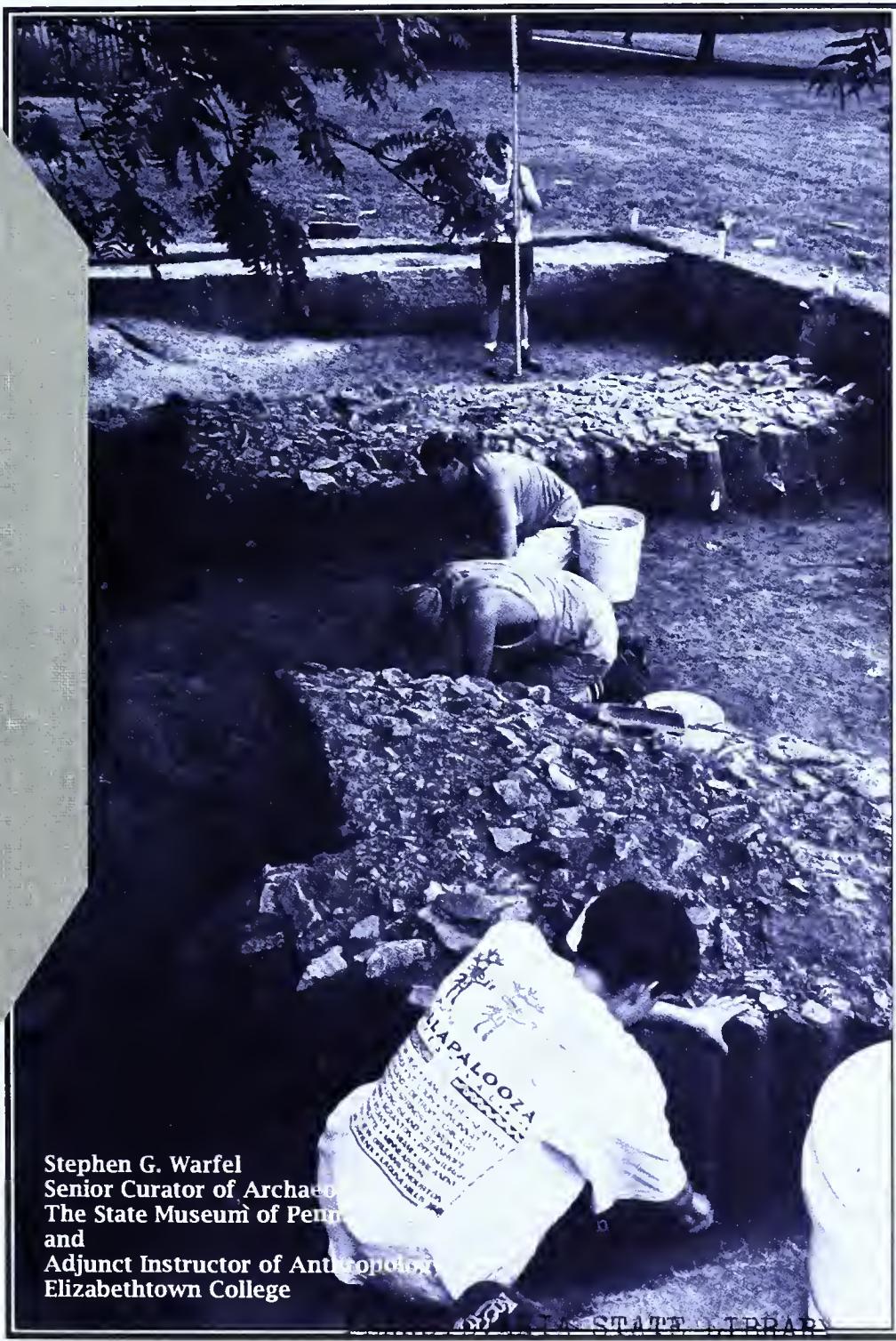


Historical Archaeology at Ephrata Cloister

A Report on 1994 Investigations



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and
Adjunct Instructor of Anthropology
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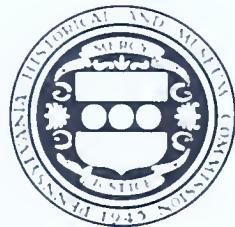
Adjunct Instructor of Anthropology
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Commonwealth of Pennsylvania

**Pennsylvania Historical
and Museum Commission**
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Acknowledgments

In the discipline of archaeology we are always “breaking new ground.” The 1994 excavation season established for the first time a cooperative relationship between Elizabethtown College and several bureaus of the Pennsylvania Historical and Museum Commission for the purpose of conducting archaeological research at Ephrata Cloister. I wish to thank particularly Dr. Frederick F. Ritsch, Provost; Dr. Robert Wheelersburg, Assistant Dean of the Faculty and Anthropology Professor; and Barbara Maroney, Director, Continuing Education, for their willingness to participate in this joint venture and contribute financial and administrative support. I am also indebted to Anita Blackaby, Director, The State Museum of Pennsylvania; John Fortier, former Director, Bureau of Historic Sites and Museums; Nadine Steinmetz, Administrator, Ephrata Cloister; the Ephrata Cloister Associates; and the Friends of The State Museum — all project cosponsors who provided additional administrative and financial aid.

Since the Ephrata Cloister Archaeology Project is dependent on the support of archaeology field schools, this research would not be possible without students willing to pay for and earn credits for the experience and training that simply cannot be gained in the classroom. Special recognition is therefore extended to

Kristin Montaperto, Alison Oskam, Ryan Marsh, Christian Lampe, Michele Ferris, and Melissa Leitch for their participation, eagerness to learn, and dedication throughout the eight week session.

I further acknowledge the skilled assistance of paid excavation team members: John Wah, Lisa Lauria, and Jenny Keller, as well as that of Beth Rump and Craig Benner, both Ephrata Cloister seasonal employees.

I would be remiss if I did not recognize and thank the twenty-eight volunteers who contributed 543 hours to help discover the Cloister’s past. Their enthusiasm, willingness to take on any assignment, and good company were appreciated by all. Without their help, the project would not have been completed on schedule or enjoyed the success that it did.

Finally, I thank Anita Blackaby, Harold Myers, Jenny Keller, Beth Rump, and William Sisson for reviewing draft versions of this booklet and offering constructive comments. I, of course, assume full responsibility for any errors which might appear in graphics, text, or interpretation offered in this report.

Stephen G. Warfel
May 3, 1995

Introduction

Why undertake archaeological investigations at Ephrata Cloister? What can possibly be learned about a historic site that is so well documented? These questions are often asked by visitors and sponsors alike. The answer lies in an understanding of how we learn about the past. Until recently, interpretations of the Cloister's history and lifeways were based solely on information gleaned from primary documents, secondary accounts, and oral tradition (frequently derived from secondary accounts). These sources share a common characteristic. They were produced for a particular purpose and often reflect the bias and/or viewpoint of the author or informant. Yet, though the subjectivity of intentional records may diminish their value, such accounts must be evaluated carefully before being dismissed. Often they preserve information which has not survived in any other form.

Since 1993, another record of the Cloister's past has begun to be explored. Archaeological field school teams have painstakingly probed beneath the green and grassy grounds of this Commonwealth historic site in search of the remains of structures and objects which once were used by celibate Brothers and Sisters who inhabited the community. Most often the artifacts found are nothing more than household trash, discarded some 250 years ago! Yet, this independent source of information promises to shed new light on important questions concerning activities and practices of the Cloister settlement.

Unlike written text, archaeological evidence constitutes an **unintentional** record of past behavior and events. Those who discarded their trash so long ago never intended for it to be found, analyzed, or understood. Therefore, archaeological evidence is considered by some to be more "democratic" or "fair." It must be remembered, however, that not all materials survive the ravages of time. As a result, interpretations based on artifacts alone may be biased by what has or has

not been preserved and found.

Obviously, the best way to learn about the past is to combine the results of documentary and archaeological research. This is the essence of Historical Archaeology and the goal of the Ephrata Cloister Archaeology Project. Where the testimony of sources agrees, confirmation or "truth" can be assumed. Where disagreement occurs, we are forced to ask why — prompting reexamination of existing evidence and renewed search. Importantly, questions about the actual process or mechanisms which underlie and make cultures (or subcultures, such as the Cloister commune) operate are raised when these two independent information sources are found to contradict.

The following report presents findings of the 1994 Historical Archaeology Field School at Ephrata Cloister. From June 6 through July 29, 1994, students, paid crew members, and volunteers labored to unearth partially a large below-ground feature (man-made disturbance) located north of the Print Shop Garden and west of the Craft House (Figure 1). This 18th-century deposit was discovered by archaeological testing in 1988 and further defined by remote sensing in 1993 (see Warfel 1990: 36-49; Bechtel 1995:12). Because this is an area of the property for which no distinct written record exists, archaeological investigation offers the only means to document and understand the nature of activities which occurred here. In this investigation historical information, believed to be relevant to interpretation of discovered artifacts and features, was considered where appropriate.

Interpretation of 1994 findings must be considered preliminary, for only part of the deposit was excavated. We do not yet know how well the extracted sample reflects the content of the whole feature. However, questions raised by the present research do provide specific problem-orientation and focus for planned 1995 investigations.

Ephrata Cloister,
Partial Site Plan

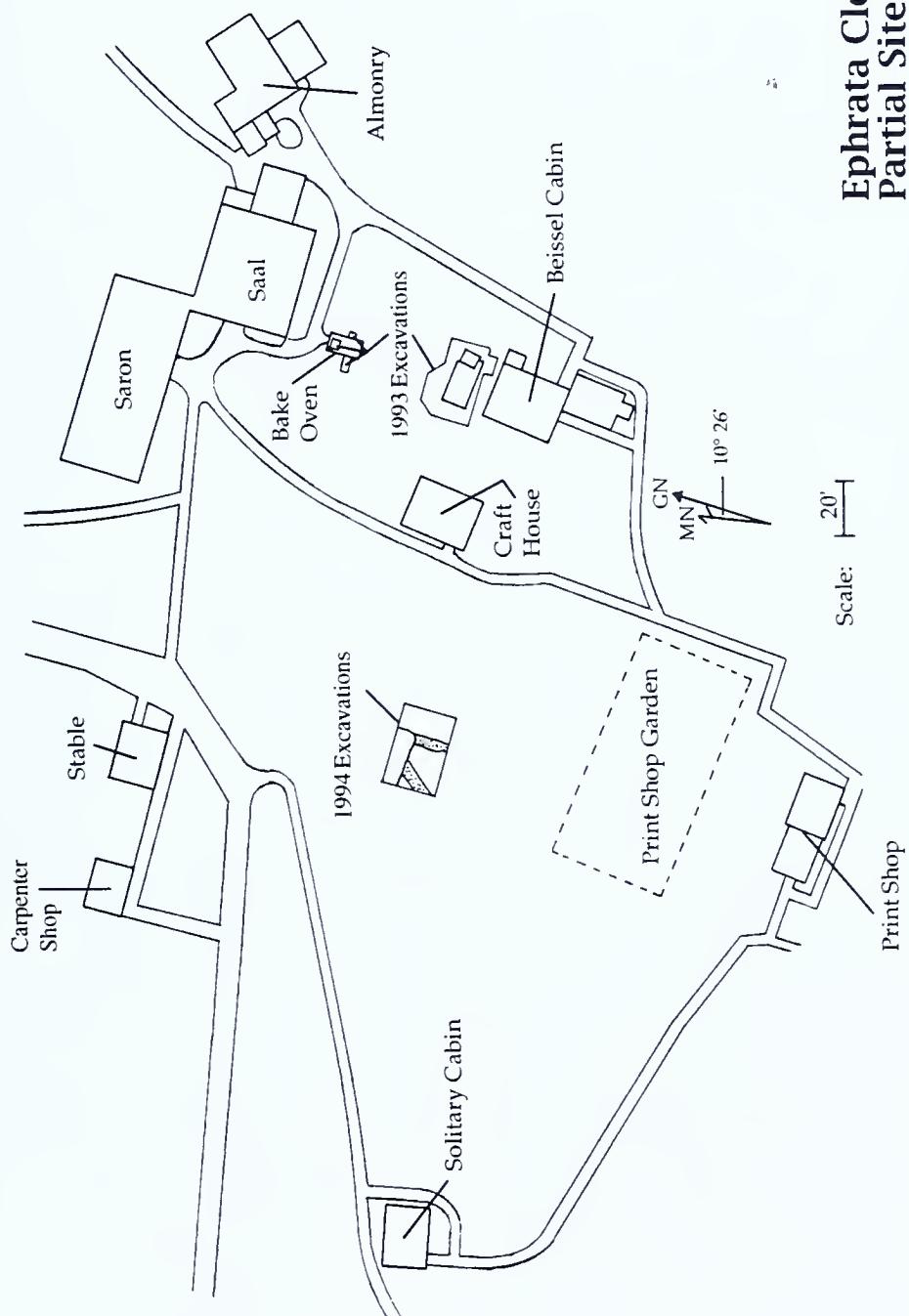


Figure 1. Partial site plan depicting location of 1994 excavation block.

Methods of Investigation

Archaeology is a destructive science. Once a site has been excavated, objects, soil layers, and features can never be returned to original discovery positions. For this reason, much time is spent carefully recording observations about the relationships of objects and the context or specific environment from which they are removed. It is important to record where objects are found by noting their position with respect to a fixed horizontal point, called a datum, and a fixed vertical point, called a bench mark.

Excavations in 1994 re-employed a sitewide grid established in 1993. The datum, designated NO EO, is located thirty feet west of the northwest corner of the Saron, whose north facade forms the primary east/west grid line. The grid is positioned so that Grid North (GN), the orientation of north/south grid lines, is 10°26' East of Magnetic North (MN). Concrete monuments, set at ground level and positioned at S100 EO and S200 EO, were selected as control points from which a secondary grid, consisting of twenty-four five-foot-square units, was established directly over the 1988 test trench location. All horizontal measurements were made with reference to grid coordinates. A bench mark of known elevation (315') was established on the concrete monument at S200 EO and used as reference for vertical measurement of below-ground finds.

Following the removal of turf with sod shovels, small hand tools, such as sharpened mason's trowels and miniature picks, were employed to scrape and remove distinct soil layers. All soils were excavated according to cultural layers, distinguished by color and texture, and screened through 1/4" hardware cloth. Artifacts were collected and bagged by

layer and/or feature within five-foot grid units. Additionally, a liter bag of unscreened soil was collected from each layer and feature level within excavation units for the purpose of flotation.

Flotation is a specialized technique employed to recover preserved botanical evidence, such as seeds and nuts. Soil samples were processed, one at a time, by emersion in an Archaeon Soil Flotation Tub (Figure 2). Suspended organic materials, so-called light fractions, were recovered in a series of nested U.S.A. Standard Testing Sieves [#10 (.0787"); #18 (.0394"); #35 (.0197"); #60 (.0098")]. Heavy fractions, consisting of any material too dense to float, were also collected. Processed samples were placed in the sun to dry, before being wrapped in newspaper "envelopes" and sent to a botanical specialist for analysis.

Plan view drawings were completed for each layer within each unit. Section or profile drawings were completed for at least one vertical wall of each unit. Excavations were recorded photographically, using black-and-white negative and color transparency films.

All excavation crew members and the author maintained daily journals which, in addition to numerous specially designed recording sheets, compose a permanent record of observations and site excavation.

Artifacts were cleaned, cataloged, and inventoried according to standard archaeological procedures. The artifact collection, field records, daily journals, and photographs are curated at The State Museum of Pennsylvania, Harrisburg, and are available for use by researchers upon written request.



Figure 2. Water-separation and collection of botanical remains using soil flotation tub.

Excavation Findings

Surface Fill Layers

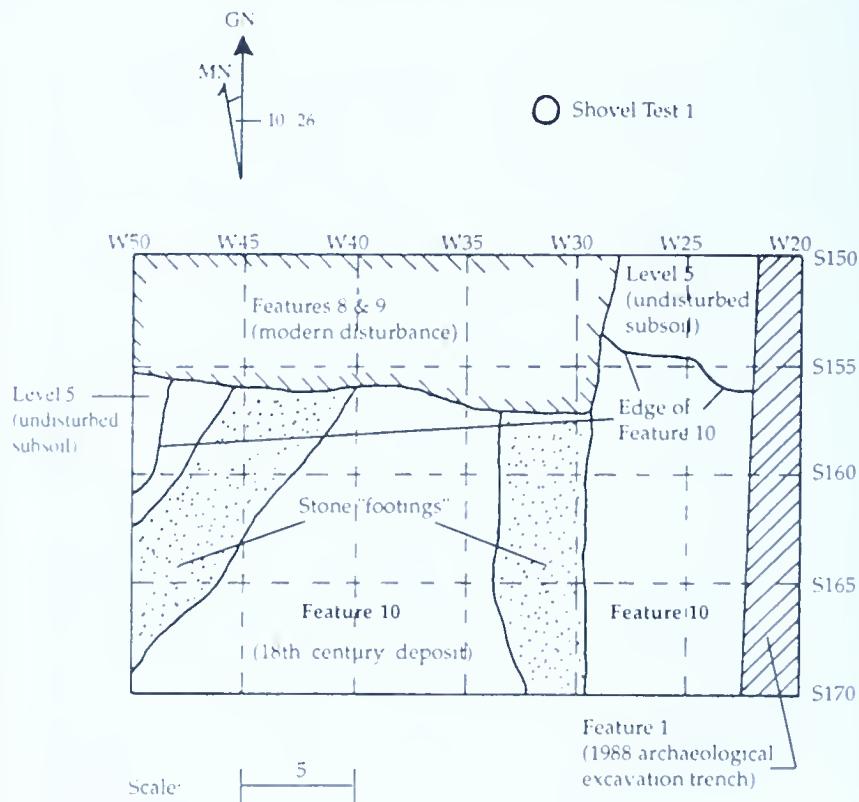
Unexpected evidence of modern disturbance was encountered immediately under the sod (Level 1). Two layers of fill, designated Levels 2 and 3, overlaid all but the easternmost grid units adjacent to the 1988 excavation trench. Hence, this overburden was not observed in the earlier excavation. Although historic artifacts were recovered from the fill layers, modern objects indicated that the layers were placed on the site at about the middle of this century. Disturbances within the modern fill layers were observed and individually investigated. Designated Features 1-6, each disturbance appeared to be the result of infilling erosion gullies

which developed in the surface - spread fill.

Buried Land Surface and Feature 8/9

Beneath Level 3, a dark, yellowish-brown silty loam was encountered and recognized as the land surface (plow zone), apparent in Cloister photographs prior to Commonwealth acquisition in 1941. This 12"-18" thick layer was designated Level 4 and blanketed the site, except where it was interrupted by a large disturbance along the northern edge of the excavation block (Figure 3). There, a stratified (layered) deposit, containing 11,470 artifacts, was encountered. Initially designated Features 8 and 9 and

Plan View of 1994 Excavation Block



Key to Test Pit Number Designations as per Block Excavation Above.

6	5	4	3	2	1
12	11	10	9	8	7
18	17	16	15	14	13
24	23	22	21	20	19

Figure 3. Plan view of 1994 excavation block.

directly capped by Level 3 fill (see Figures 4 and 5), the deposit was later determined to represent a single disturbance and contain large quantities of 18th- and 19th-century structural and household debris, including plaster, roofing tiles, nails, brick, window glass, ceramic dish and bowl fragments, and glasswares.

The occasional discovery, however, of tin foil and plastic fragments, mixed throughout all layers, hinted that the

debris was the result of more recent activity. Near the bottom, an Anchor Hocking brown-glass quart bottle and three Ray-O-Vac D-cell batteries were found. Each have datable markings, which were used to determine when the fill was deposited in the feature.

The Anchor Hocking bottle (Figure 6) has embossed markings on its base, which were decoded by Charles Perrine, Manager, Container Engineering and

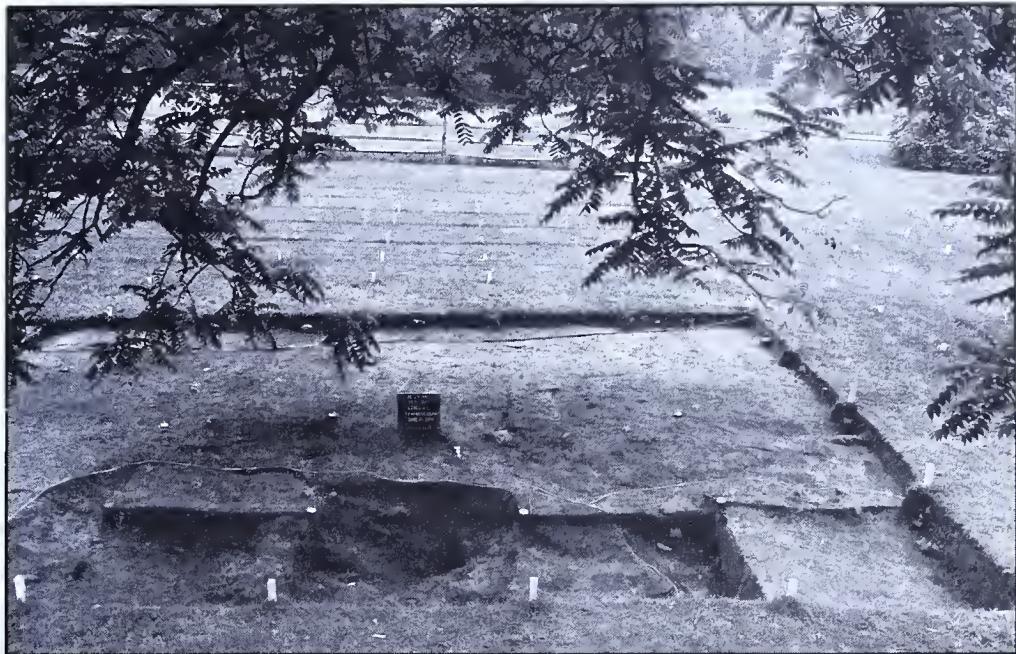


Figure 4. Feature 8/9 disturbance and Level 4 plow zone.
String line marks edge of Feature 8/9, facing south.

Specification Division, Anchor Glass Container Corporation (personal communication). The markings and their interpretation follow:

60-76 item number, as per Glass Packaging Institute (GPI) standards

6 Salem, New Jersey (plant of manufacture)

53 1953 (date of production)

11 cavity or mold number

One of the batteries was still clad with a barely readable cover bearing the design of a blue propeller-like background and the words "leak proof." According to a Ray-O-Vac Corporation representative, that guarantee was removed from the company's battery jackets in 1963 (personal communication). With the aid of these diagnostic objects, the deposit is dated to the approximate period 1953-63.

During that decade, restoration of Cloister buildings and grounds was ongoing. The period also bridges the tenure of architects, G. Edwin Brumbaugh, who oversaw restoration from 1941 until 1960,

and John K. Heyl, who succeeded him. Although the deposit cannot be positively attributed to activities directed by one or the other, it is clear that a large hole was dug for an unknown purpose and filled with refuse resulting from the restoration, including the debris of demolished structural appendages. Because the artifacts cannot be associated with specific Cloister structures or distinct dates of settlement occupation, a more detailed analysis was not pursued. Attempts to locate surviving workers who might be able to explain why a hole was dug at this location have not been successful. The search for informants continues.

Shovel Test Pit 1, illustrated in Figure 3, successfully located the northern edge of the disturbance. North/south dimensions of Feature 8/9 measured 13'10". Even though only the eastern edge of the deposit was defined, east/west measurements exceeded 22-1/2'. Average depth was 4-1/2' below ground surface.

Finally, it is noteworthy that the deposit appeared to have been filled from all sides, creating a complex layering of



Figure 5. Excavation of Feature 8/9 near completion, facing west.

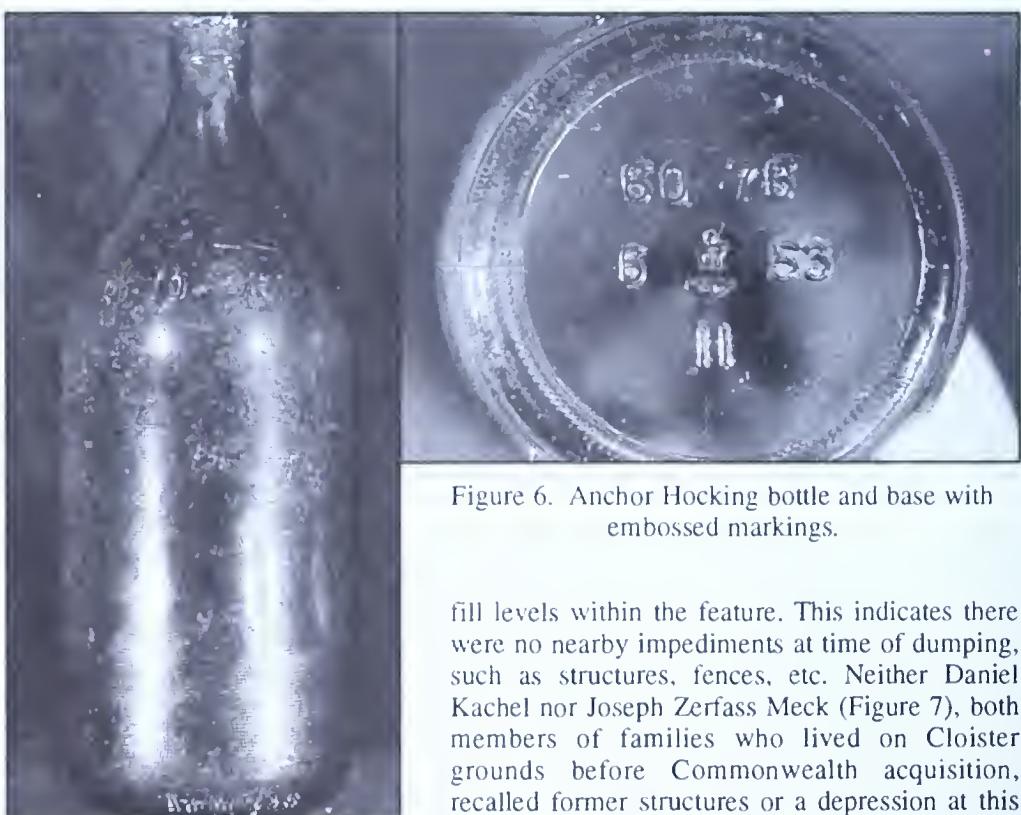


Figure 6. Anchor Hocking bottle and base with embossed markings.

fill levels within the feature. This indicates there were no nearby impediments at time of dumping, such as structures, fences, etc. Neither Daniel Kachel nor Joseph Zerfass Meck (Figure 7), both members of families who lived on Cloister grounds before Commonwealth acquisition, recalled former structures or a depression at this



Figure 7. Students interview Joseph Zerfass Meck, descendant of householder families.

location (personal communication). Early 20th-century photographs, likewise, depict no disturbance in the area. Therefore, the prospect that the feature represents the cellar of a historic structure, filled during site restoration is discounted.

Feature 10: An 18th-Century Deposit

Because the early 20th-century land surface (Level 4) was so thick and known to have been jumbled by plowing, it was removed with picks and shovels. All soil from the layer was screened. In Test Units 1, 2, 7, & 12 (see Figure 3), the plow zone lay directly over undisturbed subsoil. At these locations the northern perimeter of an 18th-century deposit, designated Feature 10 and first discovered during 1988 testing, was clearly observed and recorded. Because deep excavations were underway in Feature 8/9, a balk (unexcavated margin) was maintained south to the 160 grid line and east to the W25 grid line. Upon completion of Feature 8/9 excavations, the balk was removed, permitting full investigation of Feature 10 soils within the excavation block.

The distinction between Level 4 plow zone and the first soil level in Feature 10 was subtle. In part, this was due to mixing caused by the plow at the interface of the two layers. [Plow scars were documented in undisturbed subsoil near the excavation block in 1988 (Warfel 1990: 36-37).] Both soil layers were characterized by the same color, but different textures. Level 4 consisted of a silty loam, whereas Feature 10 Level 1 comprised a clayey loam, sometimes intermixed with fragments of burnt limestone and charcoal flecks.

Also found at the junction of the soil layers were the most intriguing structural features discovered during the 1994 excavation season. Two compact tabular limestone concentrations, each 3'-3-1/2' wide, lay directly on top of Feature 10 (see Figures 3 and 8). The easternmost concentration was oriented on a north/south axis, while the westernmost was oriented on a southwest/northeast axis. The northern ends of each had been destroyed when Feature 8/9 was dug during the restoration period. Furthermore, the surface of the westernmost concentra-



Figure 8. Excavation team members expose and pedestal tabular limestone "footing," facing southwest.

tion had been "nicked" by plowing. Limestone pieces in each were dry-laid; no evidence of mortar was observed. In order to preserve "original" or historic fabric, both concentrations were pedestaled rather than removed. Since their northern ends had already been cut by Feature 8/9, cross-sections were done where they were exposed by the modern cut. As illustrated in Figure 9, it is evident that each rests on Feature 10 Level 1 soil, which in turn lies on clay fills. The relationship between the limestone features and the distinctively different clay fills is curious. It is not clear if this association is fortuitous or intentional. If intentional, the clay fill base would provide the bearing capacity desired for structural foundations. For want of a better explanation, the limestone concentrations are presently interpreted to be "footings." If parts of a single structure, the two footings certainly imply walls meeting at awkward angles. On the other hand, they could just as well represent the remains of two closely built but separate structures.

A structural interpretation is also inferred from orientation of the footings. The easternmost one is in precise north/south alignment with the excavation grid system, which in turn is in alignment with Saron, the large extant Sister's dormitory built in 1743 (see Figure 1). Likewise, orientation of the diagonal foot-

ing parallels that of the Almonry, built ca. 1734. In a community like Ephrata Cloister, where nearly all behavior was regulated by discipline and religious beliefs, it is unlikely that any type of construction was randomly placed on the landscape. The significance of the observed relationships is not yet known.

Probes north of the excavation block to determine if a corner was present where the two concentrations would naturally meet (if uninterrupted) produced negative results. Furthermore, the 20th-century excavation of Feature 8/9 eliminated any opportunity to determine if they were connected by an east/west link within Feature 10.

Soil layers within Feature 10 varied with respect to texture, color, and artifact density and type. As previously noted, Level 1 was composed of a dark yellowish-brown clayey loam. Level 2 consisted of a mottled dark brown loam. The mottling and dark coloration of Level 2 indicate that this layer was likely deposited and left exposed to collect organic debris and rain water for a period of time before being covered. Examination of the south profile of the excavation block (Figure 10) reveals Level 2 soil both over and under the orange clay fill in Test Pit 24. The layer under the clay fill may represent a separate episode of debris accumulation.

North Profile of Feature 10 at S 160 Grid Line (following removal of modern fill levels 1-3)

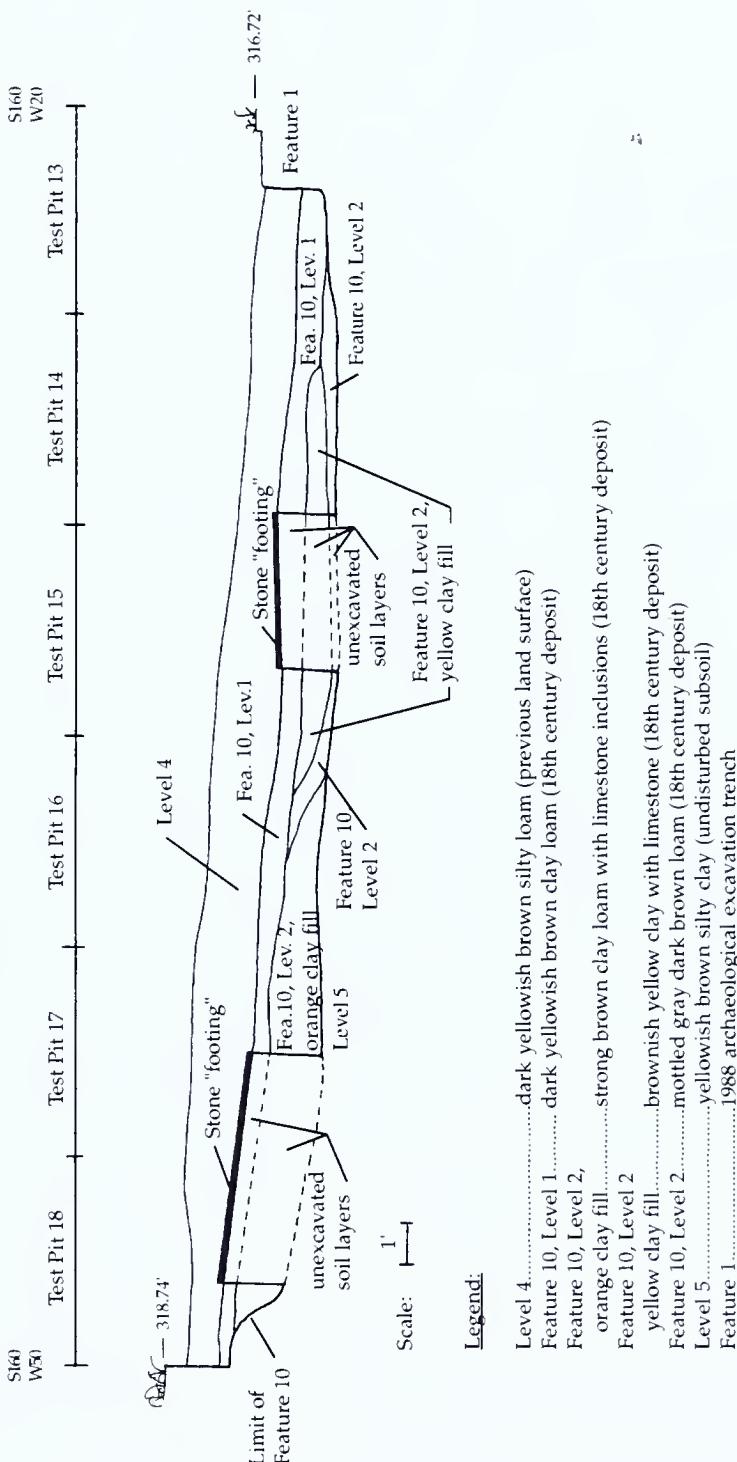


Figure 9. North profile of Feature 10 at S160 grid line.

South Profile of Excavation Block at S170 Grid Line

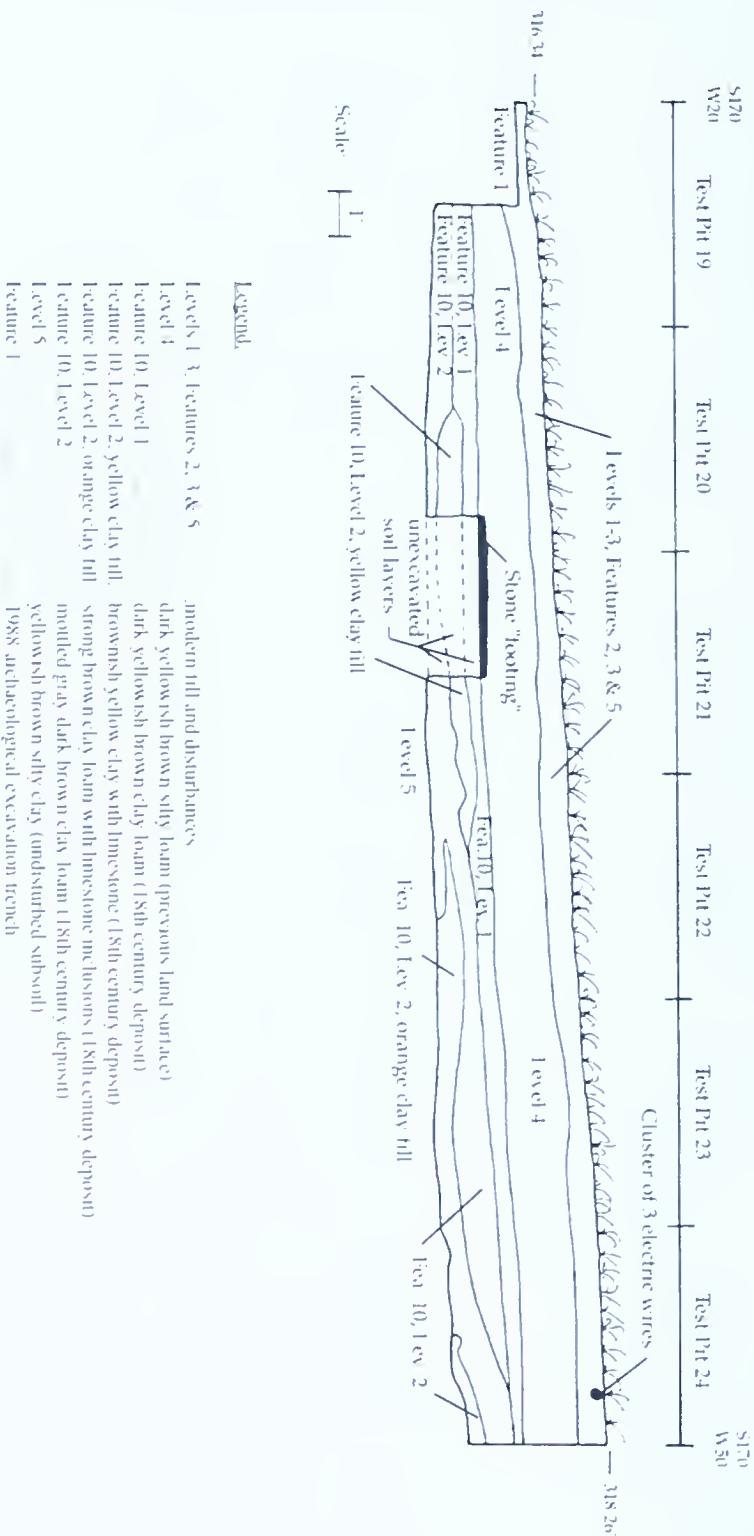


Figure 10. South profile of excavation block at S170 grid line.



Figure 11. Slip-decorated red earthenware dish, ca. 1760s.

Because it was identical in color and texture to the layer over the fill, both were given the same designation in the field. It is expected that the relationship between the two Level 2 layers will become better understood as a result of 1995 excavations in which larger portions of each are to be exposed.

Due to its stratigraphic position within the deposit, it is obvious that orange clay fill was placed in the feature before yellow clay fill. An insufficient number of datable artifacts were recovered from each clay fill layer to accurately judge how much time may have elapsed between their emplacement.

Interestingly, the yellow clay fill yielded a slip-decorated red earthenware dish sherd bearing German script which mends with fragments found in Feature 10 Level 1 (east of the north/south footing) and the 1988 Test Trench (Figure 11). The practice of decorating redware dishes with German inscriptions written in clay slip appears to have been common from the 1760s through the first quarter of the 19th-century (see Garvin 1982: 163-212). Several other ceramic sherds were found in Feature 10 Level 1, which also suggests a mid- to third quarter 18th-century closing date for the deposit (Figure 12). They include the following:

CERAMIC TYPE	QUANTITY	MEDIAN DATE
Plain white salt-glazed stoneware	13	1762.5
"Scratch blue" salt-glazed stoneware	1	1759.5
Molded white salt-glazed stoneware	1	1752.5
Jackfield ware	2	1760
Whieldon ware	1	1755
plain creamware	2	1791

Although based on a small number of objects ($n=20$), the calculated Mean Ceramic Date of this assemblage is 1765. [The Mean Ceramic Date calculation was devised by Stanley South (1977:207-218) and is used by archaeologists to arrive at an estimated average date for a given occupation level, feature, or site. A ceramic type's median date, upon which the Mean Ceramic Date is founded, is the midpoint date between the time when the

type was entered into and taken out of production.]

Another object found in Feature 10 Level 1 fill, which likely dates to the second half of the 18th-century, is a reconstructed fragment of an enameled glass bottle (Figure 13). The pattern and paint colors on the fragment are strikingly similar to those ornamenting a pocket bottle, in the collections of The State Museum of

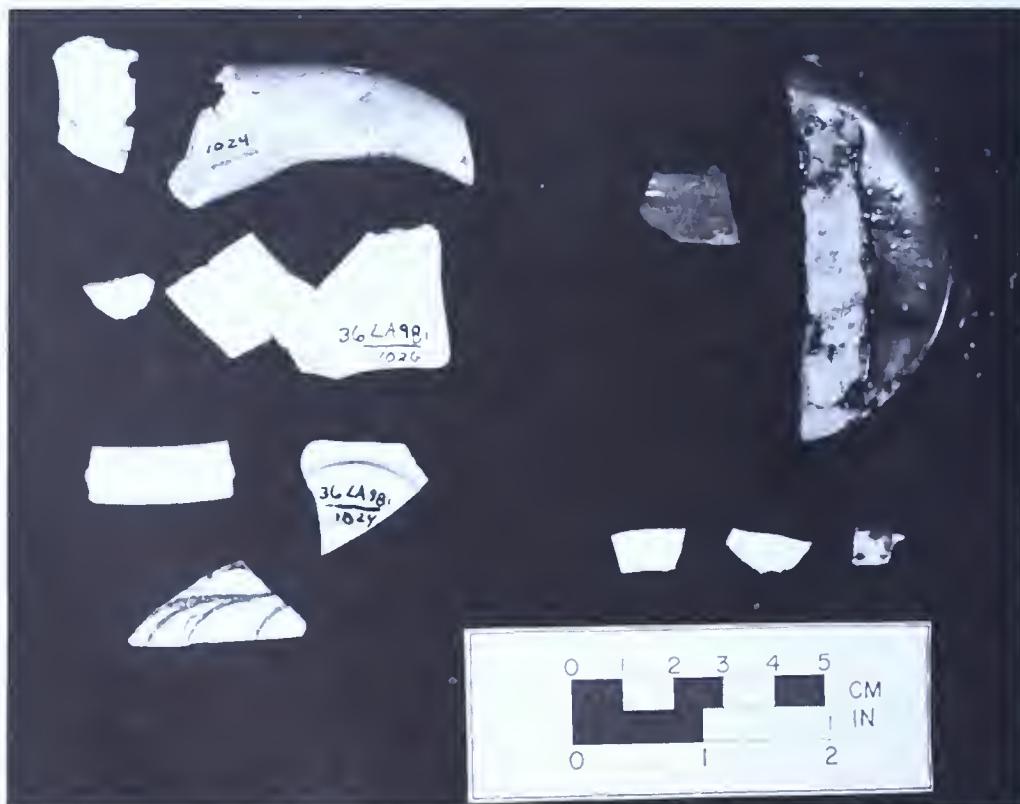


Figure 12. English-made ceramic sherds, including white salt-glazed stoneware teapot spout, recovered from Feature 10 Level 1.



Figure 13. Enameled glass bottle fragment found in Feature 10 Level 1 (left) compared with complete bottle in The State Museum of Pennsylvania's collections.

Pennsylvania and dating to 1750-1763, which was recovered from the Conestoga Indian Town site in Lancaster County.

Although the objects discussed above admittedly recommend a 1750-1765 date for the deposition of Feature 10 Level 1

soil, two factors mitigate against acceptance of this interpretation. Foremost, 97.4% (n=3341) of recovered ceramic types are red earthenware vessels for which, due to slow stylistic change in the redware potting industry, acceptable median dates cannot be determined. Upon

reconstruction, however, these vessels exhibit characteristics which suggest an earlier closing date for the Feature 10 deposit. As illustrated in Figure 14, many of the bowls have steeply angled walls and pedestal bases. These traits are reminiscent of earthenware ceramics made in Europe in the 17th-century (cf. Wilcoxen 1987). Also, a two-handled slip-decorated

cup in the assemblage resembles styles recovered at Colonial Williamsburg and attributed to the first half of the 18th-century (cf. Grigsby 1993).

When the twenty diagnostic ceramic fragments previously noted are removed from the Level 1 sample, the following datable ceramic types remain:

CERAMIC TYPE	QUANTITY	MEDIAN DATE
Combed slipware	3	1720
Tin-glazed earthenware	58	1675
English stoneware	2	1732.5

The Mean Ceramic Date calculated for these sixty-three sherds is 1679. While it is not suggested that the deposit actually dates to the year calculated, this analysis does reveal that Feature 10 and its fill may be the product of early Cloister activities.

When flotation samples were analyzed, it was observed that the structure of soils within the excavation block was

quite coarse (Roger Moeller, Ph.D., personal communication). Therefore, it is possible that these ceramic sherds and glass fragments, all quite small in size until reconstructed, could have "migrated" into the first soil layer of Feature 10 from the overlying plow zone (Level 4), which also contains examples of identical ceramic types. A modified excavation method will be used in 1995 to investigate remaining Feature 10 soils to test this



Figure 14. Composite view of reconstructed earthenware vessels recovered from Feature 10 Level 1.

proposition. Feature 10 soils will be removed in three-inch increments within natural levels. If the post-1750 artifact types discussed above occur only in the upper increment of Feature 10 Level 1 soil, it will verify that the artifact migration theory accurately explains the presence of these objects. On the other hand, if they are found in deeper soil increments, Feature 10 must be considered to have been closed in the later half of the 18th-century.

The importance of assigning a reasonably accurate date to the Feature 10 deposit cannot be overstated, for the age

of the most recent fill in the deposit provides a means for identifying the date after which the limestone concentrations ("footings") were constructed! More-precise control over soil removal and good fortune in recovering datable ceramic artifact types should permit accurate relative dating of features discovered during the present project.

To further examine similarities and differences between Feature 10 Level 1 and 2 soil layers, artifact profiles, based on artifact class frequencies, were constructed. As illustrated below, some dramatic differences are revealed.

ARTIFACT GROUP	FEATURE 10			
	LEVEL 1		LEVEL 2	
	Count	%	Count	%
Kitchen	3440	73.46	86	20.00
Architecture	718	15.33	222	51.63
Clothing	2	.04	0	0
Construction/ Maintenance	3	.07	0	0
Furniture	0	0	41	9.53
Dietary	268	5.72	31	7.21
Misc. Materials	252	5.38	50	11.63
Totals	4683	100.00	430	100.00

Artifact types found in Level 1 are distinctively domestic in nature, whereas those found in Level 2 are architectural. This difference implies that Level 2 fill was primarily the result of building and/or demolition activities, whereas Level 1 fill was more typical of daily household food preparation/consumption/refuse disposal behavior. The inverted relationship between artifact types found in the two fills further supports the previously tendered interpretation that Levels 1 and 2 were not contemporaneous and that a period of time elapsed before the below-ground hole, designated Feature 10 was closed.

The recovery of forty-one upholstery tacks, inventoried into the Furniture Group, from one unit of Feature 10 Level 2 is difficult to associate with any specialized behavior other than general disposal of unwanted or derelict furnishings. It does, nonetheless, distinguish the artifact assemblage recovered from this fill layer.

Analysis of flotation samples from all Feature 10 fill layers produced no evidence of preserved botanical remains. Refuse dumped into the hole was not from vegetable or nut food processing areas on the site (Moeller 1994: 5).

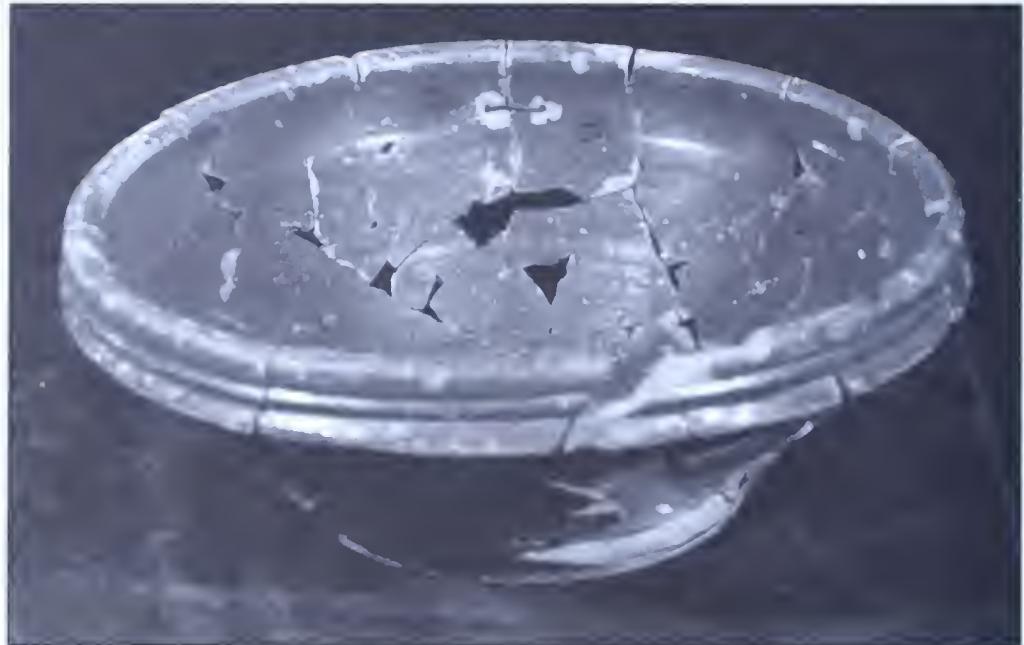


Figure 15. Reconstructed earthenware bowl with original copper wire mend.

Analysis of dietary animal bones recovered from Levels 1 and 2 revealed that cow, pig, sheep, deer, chicken, turkey, mallard duck, and turtle were present in the Cloister diet (Otter 1995: 5). This finding further supports 1993 excavation evidence which determined that Cloister dietary behavior was not strictly vegetarian as it has been characterized by historians (see Warfel 1994: 12). Accordingly to faunal analyst, Edward Otter, "The number of identified specimens and total bone weight from ... Feature 10 ... show that beef was the most commonly consumed meat. Pork was a distant second. Sheep and deer were occasional(ly) consumed, as were fowl (chicken, duck, turkey)" (1995: 10). Hand-saw, axe, and knife marks observed on some bones were executed skillfully and were probably the product of a professional butcher (Otter 1995: 12). Although it is known that Cloister Brothers came from a variety of trades, the artifacts found in this deposit do not reveal if these animals were raised and butchered on the property or if meat was provided to members of the Solitary by Household members who lived on out-lying farms.

It is important to emphasize that the

presence of dietary animal bone does not indicate that all members ate meat or that meat was commonly consumed. Numerous 18th-century visitors to the Cloister remarked that although the consumption of meat was discouraged, one could eat it if he or she so desired (see Reichmann and Doll 1953: 59). Recent research examining ratios of dietary animal bone to all other artifacts, found in several archaeological collections from 18th-century Philadelphia deposits, indicates that dietary animal bone at Ephrata Cloister occurs at a considerably lower rate (see Montaperto 1995). Since we would expect urban artifact assemblages to have few bones, due to the necessity of purchasing butchered cuts of meat, it indeed does appear that relatively little meat was consumed at the Cloister.

It is noteworthy that no artifacts representing the Recreation, Personal, Smoking Equipment, and Weapons Artifact Groups were recovered from Feature 10 fills. Their absence is conspicuous and reflective of the austere lifestyles maintained by celibate Brothers and Sisters. Perhaps no one artifact found during the 1994 dig better exemplifies frugality than a reconstructed red earthen-

ware bowl found in Feature 10 Level 1. As depicted in Figure 15, a strand of copper wire, threaded through holes drilled on each side of a large crack was used to mend the vessel and keep it in service.

Finally, two other red earthenware vessel fragments having particular significance to the Ephrata Cloister story were recovered from Feature 10 Level 1. They bear marks scratched in the clay surface some time after the vessels were fired in the kiln (Figure 16). Similar scratch marks, including distinct personal initials, have been identified on red earthenware cup bases found in association with the archaeological ruins of the Zion Hill and Bethania convents during 1960s excavations. These markings are not the maker's

marks that often appear on historic ceramics. Instead, they are interpreted to be user's marks, intentionally applied to identify vessels as one's own property.

The author has conducted research on numerous 18th-century sites over the past twenty years and has never seen nor is he aware of such marks occurring at other domestic sites. However, scratch marks have been observed on ceramic dishes recovered from military sites and naval vessels, where they are interpreted to distinguish dining or mess groups (Charles H. Fithian, personal communication). Their discovery at communal dormitory sites on the grounds of the Ephrata Cloister, a society in which "property was declared sinful, and everything brought

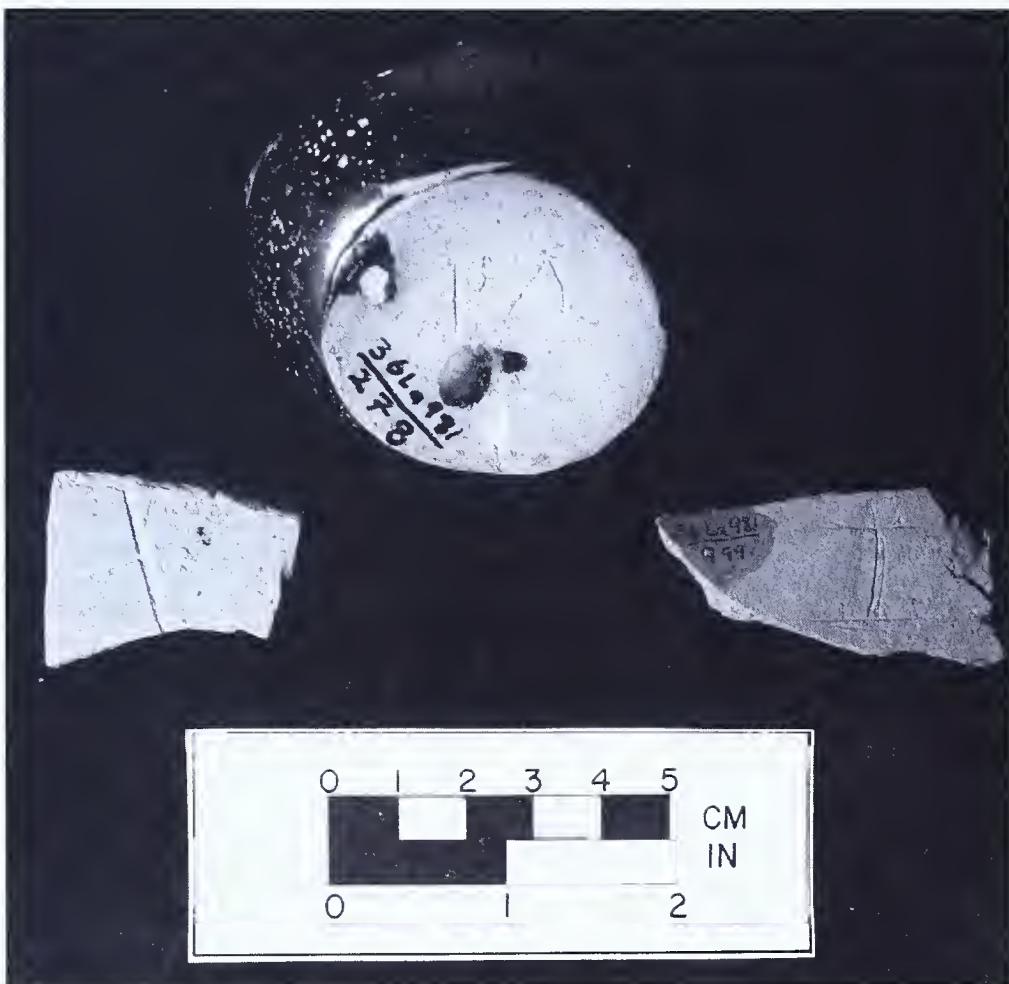


Figure 16. Scratch-marked vessel fragments (left and right) recovered from Feature 10 Level 1. Vessel base with scratched initials (center) recovered from Bethania ruins in 1965.

together in common" (Lamech and Agrippa 1786: 121), is unexpected. They signal individualistic behavior within the communal society and reflect personal property values of the "outside world" from which Cloister members came.

Conclusions

Modern archaeological research follows the scientific method — new information is gathered systematically, evaluated, and interpreted. From interpretations new hypotheses or questions are formed and are subjected to further testing and refined interpretation. Although this cycle of inquiry may be interrupted by periods of inactivity, the spiral is never-ending and ultimately yields an advanced understanding of the subject. Such is the case with the archaeological excavation conducted at Ephrata Cloister in 1994. Even though the below-ground 18th-century deposit was not investigated in its entirety, it is still possible to assemble observations and findings and present tentative interpretations. These interpretations frame important questions to be addressed by future excavations of the Feature 10 deposit and associated historic-period ground disturbances.

It is presently thought that Feature 10 was created when clay was dug for use in half-timber construction of a large nearby (communal?) building. While our excavations may never prove definitively the purpose of the hole, artifacts recovered from fill layers have continued to document the nature of community lifeways not addressed by conventional texts.

Dietary animal bones and personally inscribed ceramic sherds inform us that even though strict rules were issued to

control personal behavior, they were not always obeyed. Assuming that Cloister members adhered strictly to community leader Conrad Beissel's rules and wishes recorded in surviving documents, past historians have oversimplified Cloister lifeways and portrayed the society as static and unchanging over time. Investigation of the archaeological record suggests otherwise and prompts revised site interpretation (also see Warfel 1994: 18-20).

The location of the Feature 10 deposit within easy walking distance of freshwater springs near the Cocalico Creek, upon whose banks the first Solitary cabins were built, and in the very heart of landscape known to have been occupied by the 18th-century settlement, invites speculation that remains of the first communal convent, known as the Kedar, lie nearby. It is entirely possible that clay dug from Feature 10 was used to build the structure in 1735. If so, construction debris, such as that found in Feature 10 Level 2, would be the first refuse to be thrown into the clay pit as fill. Trash accumulated from subsequent use of the structure until at least 1773, the year of the last documented reference to the Kedar (see Lamech and Agrippa 1786:80), could have been used to fill the pit, forming a layer chronologically and functionally consistent with the contents of Feature 10 Level 1.

Although tempting to accept as fact, firm evidence in support of this scenario is not yet in hand. It is expected that planned systematic, problem-oriented research will provide confirmation or rejection and further contribute to improved understanding of the historic Ephrata Cloister community.

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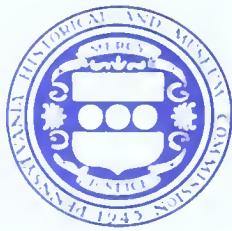
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